

# Xin He

## List of Publications by Year in descending order

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Version: 2024-02-01

28  
papers

2,965  
citations

361413

20  
h-index

526287

27  
g-index

28  
all docs

28  
docs citations

28  
times ranked

3787  
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ infrared nanospectroscopy of the local processes at the Li/polymer electrolyte interface. Nature Communications, 2022, 13, 1398.	12.8	28
2	Designing and Understanding the Superior Potassium Storage Performance of Nitrogen/Phosphorus Co-doped Hollow Porous Bowl-like Carbon Anodes. Advanced Functional Materials, 2021, 31, .	14.9	142
3	TiO <sub>2</sub> @LiTi <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> enabling fast and stable lithium storage for high voltage aqueous lithium-ion batteries. Journal of Power Sources, 2021, 484, 229255.	7.8	13
4	Revealing the working mechanism of a multi-functional block copolymer binder for lithium-sulfur batteries. Journal of Energy Chemistry, 2021, 59, 1-8.	12.9	8
5	Strategies towards enabling lithium metal in batteries: interphases and electrodes. Energy and Environmental Science, 2021, 14, 5289-5314.	30.8	156
6	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	48.7	201
7	Stable SEI Formation on Al-Si-Mn Metallic Glass Li-Ion Anode. Journal of the Electrochemical Society, 2021, 168, 100521.	2.9	3
8	Achieving Fast and Durable Lithium Storage through Amorphous FeP Nanoparticles Encapsulated in Ultrathin 3D P-Doped Porous Carbon Nanosheets. ACS Nano, 2020, 14, 9545-9561.	14.6	250
9	Competitive Adsorption of Ionic Liquids Versus Friction Modifier and Anti-Wear Additive at Solid/Lubricant Interface—Speciation with Vibrational Sum Frequency Generation Spectroscopy. Lubricants, 2020, 8, 98.	2.9	8
10	Calcium fluoride as a dominating matrix for quantitative analysis by laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS): A feasibility study. Analytica Chimica Acta, 2020, 1129, 24-30.	5.4	2
11	A disordered rock salt anode for fast-charging lithium-ion batteries. Nature, 2020, 585, 63-67.	27.8	326
12	Reversible Crosslinked Polymer Binder for Recyclable Lithium Sulfur Batteries with High Performance. Advanced Functional Materials, 2020, 30, 2003605.	14.9	63
13	Mechanochemical Reactions of Adsorbates at Tribological Interfaces: Tribopolymerizations of Allyl Alcohol Coadsorbed with Water on Silicon Oxide. Langmuir, 2019, 35, 15451-15458.	3.5	13
14	Effect of Gas Environment on Mechanochemical Reaction: A Model Study with Tribo-Polymerization of $\alpha$ -Pinene in Inert, Oxidative, and Reductive Gases. Tribology Letters, 2019, 67, 1.	2.6	8
15	Elucidating the Limit of Li Insertion into the Spinel Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> . , 2019, 1, 96-102.		45
16	Surface Structure Dependence of Mechanochemical Etching: Scanning Probe-Based Nanolithography Study on Si(100), Si(110), and Si(111). ACS Applied Materials & Interfaces, 2019, 11, 20583-20588.	8.0	30
17	Electrokinetic Phenomena Enhanced Lithium-ion Transport in Leaky Film for Stable Lithium Metal Anodes. Advanced Energy Materials, 2019, 9, 1900704.	19.5	76
18	Polymer-inorganic solid electrolyte interphase for stable lithium metal batteries under lean electrolyte conditions. Nature Materials, 2019, 18, 384-389.	27.5	587

#	ARTICLE	IF	CITATIONS
19	Self-Formed Hybrid Interphase Layer on Lithium Metal for High-Performance Lithium-Sulfur Batteries. ACS Nano, 2018, 12, 1500-1507.	14.6	149
20	Surface Chemistry Dependence of Mechanochemical Reaction of Adsorbed Molecules—An Experimental Study on Tribopolymerization of $\alpha$ -Pinene on Metal, Metal Oxide, and Carbon Surfaces. Langmuir, 2018, 34, 2432-2440.	3.5	32
21	Mechanochemical Association Reaction of Interfacial Molecules Driven by Shear. Langmuir, 2018, 34, 5971-5977.	3.5	46
22	Water Adsorption on Hydrophilic and Hydrophobic Surfaces of Silicon. Journal of Physical Chemistry C, 2018, 122, 11385-11391.	3.1	118
23	Fluorine-free water-in-ionomer electrolytes for sustainable lithium-ion batteries. Nature Communications, 2018, 9, 5320.	12.8	71
24	Mechanochemistry of Physisorbed Molecules at Tribological Interfaces: Molecular Structure Dependence of Tribochemical Polymerization. Langmuir, 2017, 33, 2717-2724.	3.5	32
25	Mechanochemistry at Solid Surfaces: Polymerization of Adsorbed Molecules by Mechanical Shear at Tribological Interfaces. ACS Applied Materials & Interfaces, 2017, 9, 3142-3148.	8.0	99
26	Organosulfide-plasticized solid-electrolyte interphase layer enables stable lithium metal anodes for long-cycle lithium-sulfur batteries. Nature Communications, 2017, 8, 850.	12.8	240
27	Friction and Tribochemical Wear Behaviors of Native Oxide Layer on Silicon at Nanoscale. Tribology Letters, 2017, 65, 1.	2.6	30
28	Antifouling, High-Flux Nanofiltration Membranes Enabled by Dual Functional Polydopamine. ACS Applied Materials & Interfaces, 2014, 6, 5548-5557.	8.0	189